# SCIENTIFIC ITEMS IN THE MARKS COLLECTION AT THE QUEENSLAND MUSEUM

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#### Abstract

The Marks Collection is the largest body of material items from a single family in the Social History collection of the Queensland Museum. In social history terms, the collection is a slice through the life of a well-to-do Brisbane family, mostly from between the two World Wars, and includes a few items which, in their own right, are of international significance. Scientific objects are a small part of the collection but reflect the family's scientific interests, both as scientific practitioners themselves, and as a family with broader interests in popular science.

#### Introduction

Comprising more than 2000 items, the Marks Collection in the Social History collection at the Queensland Museum forms the largest body of material from a single family in that collection. It is one of several donated collections of both historical and scientific items from that family in the Queensland Museum and other institutions. Others include materials in the Samford Museum, the John Oxley Library and the Queensland Art Gallery, and the E.N. Marks mosquito collections in the University of Queensland Insect Collection (Schneider and Daniels 2006). While this article is primarily concerned with items in the Queensland Museum Social History collection, the contribution of the Marks family to these other collecting institutions has been remarkable and deserves fuller documentation. These collections offer valuable possibilities for research in several different directions, including the material culture of the Marks family itself. Indeed, it has been suggested that it would be useful to develop a single database of the various Marks collections so they can be researched together.

## Marks family items in the Queensland Museum Social History collection

The collection includes items from a number of different members and branches of the Marks family, though it is particularly identified with entomologist Dr Elizabeth Nesta Marks (1918-2002). Known to all as Pat Marks, she was the last member of her branch of the family and was the conduit of much of their collection to the Museum. The recent re-storage of the collection was also due to her, being funded by a generous donation from the Marks estate following her death in 2002.

As far as the Queensland Museum is concerned, the Marks Collection dates from 1919, when Dr Charles Ferdinand Marks (grandfather of Pat Marks) donated a convict leg-iron and chain recovered that year from a dig at the Treasury Building, now the Casino. He also gave the Museum a piece of raw rubber. The jewel of the collection is the Tompion clock (Fig. 1), donated by Alexander Hammett Marks (uncle to Pat Marks) in 1954. Thomas Tompion is known as the father of English clockmaking (Evans 2006). His partnership

with Edward Banger lasted from 1700 to 1708, when they parted suddenly (apparently in anger), after achieving unparalleled heights of craftsmanship. They made this clock in 1706. Tompion combined English technical advances with his own superb workmanship, and ingenious designs, to produce timepieces that contributed vastly to the fame of English clockmaking in the late 17th and early 18th centuries. Their clocks were numbered and this one is 435. Marks and Cummins (2004) record that the Tompion clock originally belonged to a Miss Reade who had a ne'er-do-well nephew and gave the clock to her neighbour, Pat's grandmother, to keep it out of his hands.



Fig. 1. The Tompion clock (H-4).

The bulk of the collection dates from a small number of major donations over the past 40 years. Miss Edris Marie Blanche Marks (aunt to Pat Marks) made a major donation in 1978 and Pat Marks, both in her own right and from Edris Marks' estate, gave the Museum a large quantity of material in 1982, collected by then Senior Curator of History and Technology, Dan Robinson, from the Marks residence at 101 Wickham Terrace prior to its sale. This comprises a large quantity of domestic items. Museum space issues would prevent such a donation today, but the fact that it was possible then has led to the Museum's possession of a collection remarkable, not only for major

objects, but also for its range of ordinary things. These together represent a large slice of the material culture of one Brisbane family, and are particularly rich for the period between the two World Wars.

From a completely separate stream of donation, the Queensland Museum also has 1224 anthropological items from the Marks family, including important Aboriginal items plus many from Papua New Guinea. Pat reported that some of these had been given to her grandfather by Sir William Macgregor, and came to the Museum because her mother refused to have them in the bedroom (Marks and Cummins 2004).

The collection totals more than 2000 items and covers a remarkable range. There is, for example, Alec (A.H.) Marks' important gun collection from the 1940s, including a wonderful pair of Manton pistols (Fig. 2). Joseph Manton (1760-1835) was a renowned British gunsmith who made important innovations in the design and construction of both duelling pistols, such as these, and of artillery. The Queensland Museum pistols are particularly fine examples of his art.



Fig. 2. A pair of Manton duelling pistols (H-2022-23).

Also included is the remarkable ball gown (Fig. 3) made by Brisbane costumier Janet Walker, who worked in Brisbane between 1882 and 1938 (Marendy 2005). The gown was donated in 1998 and was later restored by Brisbane textile conservator, Michael Marendy, with assistance from the

Marks estate. Mrs Walker operated the largest private dressmaking establishment in Brisbane and, by 1898, employed 120 staff. Several of her gowns were worn at the opening of the Commonwealth Parliament in 1901.

Less spectacularly, the Marks Collection also includes: locks and doorknobs; office equipment; male bathing costumes from the 1940s; Elizabeth Drury's angora goat awards from the Brisbane Show before World War I; 468 ordinary items of domestic life at 101 Wickham Terrace; handcraft items (sewing, knitting and crochet); timepieces, the most valuable component, though not the most numerous, including the Tompion clock and two important chronometers; examples of gas, kerosene and electric lighting technologies; medical items; militaria, including gas masks from both World Wars; musical items; nursery toys; 239 packages and containers from 1870 to 1920; many personal effects and toiletries; photographic equipment; tools relating to carpentry, horology, hairdressing, jewellery, gold leaf application and painting.



Fig. 3. A ball gown made by Janet Walker (H-42023).

#### Scientific items in the Queensland Museum Marks collection

Relatively few (151) of the items could be called scientific, and these on the whole are not the most significant items in the collection. Pat Marks' own career as an entomologist is well known (Anon. 1986, Standfast 2006) and her father, Edward Oswald Marks, was a Brisbane doctor like his father before him, so the Marks family had a strong preoccupation with science. At the same time, the family was well-to-do and able to follow popular scientific interests of the day, particularly in geology and natural history. The scientific items in the collection reflect these influences. They include: a number of compasses; a Sikes hydrometer; a prismatic level; a beam balance; a number of sets of scales; a number of thermometers; a spirit lamp; a revolution counter; a set of postal scales; a wooden set-square; a set of scales and weights, including a hand-held beam balance and weights; a number of test tubes, funnels and pipettes; microscope slides; a spinthariscope; centrifuge tubes; graduated cylinders; Bunsen burners; a copper pencil; a carbon filter; beakers; magnifying glasses; a travelling microscope; microscope slides; microscope lenses, eye pieces and accessories. Six of these items are pictured (OM photographs) and described here.

## Sikes hydrometer, H-10987 (Fig. 4)

How this item came into their possession is not known, but it is a typical Marks curiosity, used to measure the proof of spirits. Sikes hydrometers have a curious history. 'In 1802 the Board of Excise held a competition to find a better instrument than Clarke's hydrometer for revenue purposes ... The winning design was that of Bartholomew Sikes, a peripatetic London employee of the excise commissioners. Sikes' hydrometer was enshrined in legislation in 1816 with the Sikes Hydrometer Act and remained the legal standard until 1907' (http://www.promash.com/sikes/history.html 13-10-2005).

### Pocket microscope, H-12783 (Fig. 5)

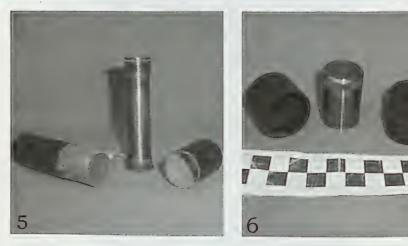
Who used this microscope is not clear, though it may have been a suitable instrument for Pat Marks on her field trips. The microscope was made by Horatio Yeates of Dublin, and is thus marked. Its date of manufacture is not certain.

# Spinthariscope, H-23659 (Fig. 6)

This is another Marks curiosity. 'A spinthariscope is a now almost entirely disused scientific device for observing individual radioactive decay nuclear disintegrations ... invented by William Crookes in 1903 ... a device specifically intended to view these scintillations ... It consisted of a small screen coated with zinc sulfide affixed to the end of a tube, with a tiny amount of radium salt suspended a short distance from the screen and a lens on the other end of the tube for viewing the screen ... for a short time after its invention, spinthariscopes were very popular among the social upper classes

who gave them as gifts and used them in demonstrations to appear up-to-date with the most modern scientific advances of the day' (Wikipedia, http://en.wikipedia.org/w/index.php?title=Spinthariscope&action=edit 12-10-2005).





Figs 4-6. (4) A Sikes hydrometer (H-10987). (5) A pocket microscope (H-12783). (6) A spinthariscope (H-23659/1 & 2).



Fig. 7. Pat Marks' collecting bag (H-46713).

#### Collecting bag, H-46713 (Fig 7)

This is Pat Marks' collecting bag, used on her field expeditions. It is a khaki, army-style bag, with two carry straps and a shoulder strap, a single zip and six internal pockets. Its dilapidated state is a clue to the sentimental attachment she felt towards it, which will no doubt be recognised by many other collectors.

# Field microscope, H-46212 (Fig. 8)

This instrument dates from around 1800 and was Pat Marks' last donation to the Museum before her death in 2002. It had been given to the young Charles Ferdinand Marks in the 1860s by a very old man in Ireland. C.F. Marks arrived in Australia in his early twenties and married Elizabeth Dods, a widow with three boys. They lived on Wickham Terrace and had four children, Alexander Hammett, Edward Oswald (Pat's father), Charles and Edris. The microscope was passed to Alexander Hammett on the death of Charles Ferdinand and then to Pat.

The piece is stored in a brown polished timber box that also serves as a base for the microscope when assembled. The microscope is attached to the lid through a circular base made of brass. Inside, the box is lined with blue velvet. The parts of the microscope are stored in special depositories. These include: 1 microscope barrel with eyepiece; 8 lenses of varying sizes; 1 stand with a mirror; 1 rounded mirror; 7 miscellaneous joints; 3 wooden slides with 4 samples each; 1 red unprepared slide; 1 piece of circular glass with backing. The microscope is gold, as are the hinges and the two hooks located either side of the box. There is one silver key with the box.



Fig. 8. A field microscope (H-46212).

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